

## IN THE CLAIMS

Claims 1-40 (Canceled)

41. (Currently Amended) ~~A catalytic composition, comprising a beta zeolite, cobalt, a metal of group VIB and optionally one or more oxides as a carrier wherein said catalyst has a surface area of  $\geq 380 \text{ m}^2/\text{g}$  and a pore volume  $\geq 1.10 \text{ cm}^3/\text{g}$~~  A catalytic composition having a surface area =  $380 \text{ m}^2/\text{g}$  and a pore volume =  $1.10 \text{ cm}^3/\text{g}$  consisting of:

one or more oxides as a carrier and

a catalyst consisting of a beta zeolite, cobalt, a metal of Group VI B wherein said zeolite is present in a quantity ranging from 70 to 90% by weight, the weight percentage of cobalt varies from 1 to 10% with respect to the total weight of the catalyst, the weight percentage of the metal of Group VI B varies from 4 to 20% with respect to the total weight of the catalytic composition, and wherein cobalt and the metal of Group VI B are present in a molar ratio not greater than 2.

42. (Previously Presented) The catalytic composition according to Claim 41, wherein the beta zeolite comprises cationic sites that are occupied by hydrogen ions.

43. (Previously Presented) The catalytic composition according to Claim 42, wherein at least 80% of the cationic sites are occupied by hydrogen ions.

44. (Canceled)

45. (Previously Presented) The catalytic composition according to Claim 41, wherein said zeolite is present in a quantity ranging from 5 to 30% by weight with respect to the total weight of the catalyst.

46. (Previously Presented) The catalytic composition according to Claim 41, wherein the metal of group VIB is molybdenum.

47. (Canceled)

48. (Previously Presented) The catalytic composition according to Claim 41, wherein cobalt is present in a quantity ranging from 2 to 6% by weight with respect to the total weight of the catalyst.

49. (Canceled)

50. (Previously Presented) The catalytic composition according to Claim 41, wherein the metal of group VIB is present in a quantity ranging from 7 to 13% by weight with respect to the total weight of the catalyst.

51. (Canceled)

52. (Previously Presented) The catalytic composition according to Claim 41, wherein cobalt and the metal of group VIB are present in a molar ratio no greater than 1.

53. (Previously Presented) The catalytic composition according to Claim 41, wherein the oxide comprises an element Z selected from the group consisting of silicon, aluminum, titanium, zirconium, and combinations thereof.

54. (Previously Presented) The catalytic composition according to Claim 41, wherein the oxide is alumina or alumina mixed with an oxide selected from the group consisting of silica and zirconia.

55-56. (Canceled)

57. (Previously Presented) A process for the preparation of a catalytic composition, wherein the composition comprises a beta zeolite, a metal of group VIB, cobalt, and one or more oxides as a carrier, comprising:

a) preparing an alcoholic dispersion comprising a soluble salt of cobalt, a beta zeolite, and one or more organic compounds capable of generating the supporting oxide or oxides;

b) preparing an aqueous solution comprising a soluble salt of the metal of group VIB, and optionally, tetraalkylammonium hydroxide having the formula  $R_4NOH$ ;

- c) mixing the alcoholic dispersion and the aqueous dispersion to obtain a gel;
- d) aging the gel at a temperature ranging from 10 to 40°C;
- e) drying the gel; and
- f) calcinating the gel.

58. (Previously Presented) The process according to Claim 57, wherein the salt of cobalt is nitrate.

59. (Previously Presented) The process according to Claim 57, wherein the organic compound capable of generating the oxide is the corresponding alkoxide, wherein substituents of the oxide have the formula (R'O)- wherein R' is an alkyl containing from 2 to 6 carbon atoms.

60. (Previously Presented) The process according to Claim 59, wherein the alkoxide comprises an element Z selected from the group consisting of silicon, aluminum, titanium, zirconium, and mixtures thereof.

61. (Previously Presented) The process according to Claim 59, wherein a trialkoxide having the formula (R'O)<sub>3</sub>Al is used, wherein R' is isopropyl or sec-butyl.

62. (Previously Presented) The process according to Claim 59, wherein a trialkoxide having the formula (R'O)<sub>4</sub>Si is used, wherein R' is ethyl.

63. (Previously Presented) The process according to Claim 59, wherein a trialkoxide having the formula (R'O)<sub>4</sub>Zr is used, wherein R' is isopropyl.

64. (Previously Presented) The process according to Claim 57, wherein the soluble salt of the metal of group VIB is an ammonium salt.

65. (Previously Presented) The process according to Claim 57, wherein the tetraalkylammonium hydroxide has the formula R<sub>4</sub>NOH, wherein R is an alkyl group containing from 2 to 7 carbon atoms.

66. (Previously Presented) A process for the preparation of a catalytic composition, wherein the composition comprises a beta zeolite, a metal of group VIB, cobalt, and one or more oxides as a carrier, comprising:

a) preparing an alcoholic dispersion comprising a beta zeolite and one or more organic compounds capable of generating the supporting oxide or oxides;

b) preparing an aqueous solution comprising tetraalkylammonium hydroxide having the formula  $R_4NOH$ ;

c) mixing the alcoholic dispersion and the aqueous solution to obtain a gel;

d) aging the gel at a temperature ranging from 10 to 40°C;

e) drying the gel;

f) calcinating the gel; and

g) impregnating the calcined product with a solution comprising a salt of a metal of group VIB, drying the impregnated calcined product, calcinating the impregnated calcined product, and impregnating the product with a solution of a salt of cobalt, drying the resultant product, and calcinating the resultant product.

67. (Previously Presented) A process for the preparation of a catalytic composition, wherein the catalytic composition comprises a beta zeolite, a metal of group VIB, cobalt, and one or more oxides, comprising:

a) preparing an alcoholic dispersion comprising a soluble salt of cobalt and one or more organic compounds capable of generating the supporting oxide or oxides;

b) preparing an aqueous solution comprising a soluble salt of the metal of group VIB, and optionally, tetraalkylammonium hydroxide having the formula  $R_4NOH$ ;

c) mixing the alcoholic dispersion and the aqueous dispersion to obtain a gel;

d) aging the gel at a temperature ranging from 10 to 40°C;

- e) drying the gel;
- f) mechanical mixing of the dried product with beta zeolite; and
- g) calcinating the mixture.

68. (Canceled)

69. (Previously Presented) The process of Claim 57, wherein the catalyst has a surface area of  $\geq 380 \text{ m}^2/\text{g}$  and a pore volume  $\geq 1.10 \text{ cm}^3/\text{g}$ .

70. (Previously Presented) A process for the preparation of a catalytic composition, wherein the composition comprises a beta zeolite, a metal of group VIB, a metal of Group VIII, and one or more oxides as a carrier, comprising:

- a) preparing an alcoholic dispersion comprising a soluble salt of a metal of Group VIII, a beta zeolite, and one or more organic compounds capable of generating the supporting oxide or oxides;
- b) preparing an aqueous solution comprising a soluble salt of the metal of group VIB, and optionally, tetraalkylammonium hydroxide having the formula  $\text{R}_4\text{NOH}$ ;
- c) mixing the alcoholic dispersion and the aqueous dispersion to obtain a gel;
- d) aging the gel at a temperature ranging from 10 to  $40^\circ\text{C}$ ;
- e) drying the gel; and
- f) calcinating the gel.

71. (Previously Presented) The process according to Claim 70, wherein the salt of the metal of Group VIII is nitrate.

72. (Previously Presented) The process according to Claim 70, wherein the organic compound capable of generating the oxide is the corresponding alkoxide, wherein

substituents of the oxide have the formula (R'O)- wherein R' is an alkyl containing from 2 to 6 carbon atoms.

73. (Previously Presented) The process according to Claim 72, wherein the alkoxide comprises an element Z selected from the group consisting of silicon, aluminum, titanium, zirconium, and mixtures thereof.

74. (Previously Presented) The process according to Claim 72, wherein a trialkoxide having the formula (R'O)<sub>3</sub>Al is used, wherein R' is isopropyl or sec-butyl.

75. (Previously Presented) The process according to Claim 72, wherein a trialkoxide having the formula (R'O)<sub>4</sub>Si is used, wherein R' is ethyl.

76. (Previously Presented) The process according to Claim 72, wherein a trialkoxide having the formula (R'O)<sub>4</sub>Zr is used, wherein R' is isopropyl.

77. (Previously Presented) The process according to Claim 70, wherein the soluble salt of the metal of group VIB is an ammonium salt.

78. (Previously Presented) The process according to Claim 70, wherein the tetraalkylammonium hydroxide has the formula R<sub>4</sub>NOH, wherein R is an alkyl group containing from 2 to 7 carbon atoms.

79. (Previously Presented) The process of Claim 70, wherein the catalyst has a surface area of  $\geq 380 \text{ m}^2/\text{g}$  and a pore volume  $\geq 1.10 \text{ cm}^3/\text{g}$ .

80. (Previously Presented) The process of Claim 67, wherein the catalyst has a surface area of  $\geq 380 \text{ m}^2/\text{g}$  and a pore volume  $\geq 1.10 \text{ cm}^3/\text{g}$ .

81. (Previously Presented) A process for the preparation of a catalytic composition, wherein the catalytic composition comprises a beta zeolite, a metal of group VIB, a metal of Group VIII, and one or more oxides, comprising:

- a) preparing an alcoholic dispersion comprising a soluble salt of the metal of Group VIII and one or more organic compounds capable of generating the supporting oxide or oxides;
- b) preparing an aqueous solution comprising a soluble salt of the metal of group VIB, and optionally, tetraalkylammonium hydroxide having the formula  $\text{R}_4\text{NOH}$ ;
- c) mixing the alcoholic dispersion and the aqueous dispersion to obtain a gel;
- d) aging the gel at a temperature ranging from 10 to  $40^\circ\text{C}$ ;
- e) drying the gel;
- f) mechanical mixing of the dried product with beta zeolite; and
- g) calcinating the mixture.

82. (Previously Presented) The process of Claim 81, wherein the catalyst has a surface area of  $\geq 380 \text{ m}^2/\text{g}$  and a pore volume  $\geq 1.10 \text{ cm}^3/\text{g}$ .

83. (New) The process of claim 66, wherein the catalyst has a surface area =  $380 \text{ m}^2/\text{g}$  and a pore volume =  $1.10 \text{ cm}^3/\text{g}$ .

84. (New) A process for the preparation of a catalytic composition, wherein the composition comprises a beta zeolite, a metal of group VIB, a metal of Group VIII, and one or more oxides as a carrier, comprising:

a) preparing an alcoholic dispersion comprising a beta zeolite and one or more organic compounds capable of generating the supporting oxide or oxides;

b) preparing an aqueous solution comprising tetraalkylammonium hydroxide having the formula  $R_4NOH$ ;

c) mixing the alcoholic dispersion and the aqueous solution to obtain a gel;

d) aging the gel at a temperature ranging from 10 to 40°C;

e) drying the gel;

f) calcinating the gel; and

g) impregnating the calcined product with a solution comprising a salt of a metal of group VIB, drying the impregnated calcined product, calcinating the impregnated calcined product, and impregnating the product with a solution of a salt of a metal of Group VIII, drying the resultant product, and calcinating the resultant product.

85. (New) The process of claim 84, wherein the catalyst has a surface area = 380  $m^2/g$  and a pore volume = 1.10  $cm^3/g$ .

86. (New) A catalytic composition having a surface area = 380  $m^2/g$  and a pore volume = 1.10  $cm^3/g$  consisting of:

one or more oxides as a carrier and

a catalyst consisting of a beta zeolite, cobalt, a metal of Group VI B wherein said zeolite is present in a quantity ranging from 70 to 90% by weight, the weight percentage of cobalt varies from 1 to 10% with respect to the total weight of the catalyst, the weight percentage of the metal of Group VI B varies from 4 to 20% with respect to the total weight of the catalytic composition, and wherein cobalt and the metal of Group VI B are present in a molar ratio not greater than 2, prepared with a process consisting of the following steps:

a) an alcoholic dispersion is prepared, containing a soluble salt of cobalt, beta zeolite and one or more organic compounds capable of generating the supporting oxide or oxides;



- b) an aqueous solution is prepared containing a soluble salt of the metal of group VI B and, optionally, tetrealkylammonium hydroxide having the formula  $R_4NOH$ ;
- c) the alcoholic dispersion and the aqueous dispersion are mixed and a gel is obtained;
- d) ageing the gel at a temperature ranging from 10 to 40°C;
- e) drying the gel; and
- f) calcinating the gel.